### A Descriptive Analysis of Medical Malpractice Insurance Premiums, 1974-1977

by Nancy T. Greenspan

The rapid increase in medical malpractice insurance claims and concomitant increases in premiums in the early 1970's concerned the medical and government communities. In 1974 alone, there was a 195 percent increase in malpractice suits filed in State courts (Federal Medical Malpractice Insurance Act, 1975). Major efforts to understand the nature of the "crisis" and its potential solutions included a lengthy report issued in 1975 by the Department of Health, Education and Welfare Secretary's Commission on Medical Malpractice (1975) and Congressional hearings held in 1973 (Federal Malpractice Insurance Act, 1975). By 1977, premium rates and the number of malpractice claims filed seemed to have stabilized. Robert Helms of the American Enterprise Institute for Public Policy Analysis asserts that one source of the "cooling down" stems from malpractice cases being more often decided by a jury rather than a judge as was previously done. It appears that in close cases, juries are now more often deciding in favor of the defendant, thus providing fewer incentives for plaintiffs to sue (Rottenberg, 1978).

Data also show that the financial strength of many insurance companies was weak during the period of the early 1970's. The unpredicted increases in both claims filed and the size of the awards caused many companies to draw down their reserve funds. This occurrence, together with a sharp decline in companies' investment portfolios in 1974, caused many companies either to go bankrupt or to withdraw from the malpractice insurance market, creating a shortage in the availability of coverage in many states. For instance, although Massachusetts had relatively small increases in premiums in 1975, the State's two major malpractice insurers were trying to pull out of the market, and many physicians had difficulty in obtaining coverage. In many other states, insurers were either discontinuing coverage, limiting the amount that could be purchased, or not selling to newly-licensed physicians. As a reaction to this shortage, many state legislatures established joint underwriting associations (JUAs) which forced all companies selling personal liability insurance in the state to participate in a state-controlled plan to provide malpractice insurance coverage. This action eased the tight market situation.

Nancy T. Greenspan is an economist in HCFA's Office of Research, Demonstrations, and Statistics in the Division of Economic Analysis. The period of calm in 1977 and 1978 should not suggest that all problems have been resolved, however. Data from one of the largest malpractice insurers show that in 1978 the number of new claims increased by 12 percent over the previous year and that the average value of each claim rose by 18 percent. The company plans to increase 1979 premiums in 20 of the 29 states in which it writes insurance (Malpractice Digest, May/June 1979). This will be the first substantive increase since 1976.

The sudden rise in malpractice premiums caused them to be a more significant factor in physicians' practice costs. In order to adjust Medicare fee levels to take into account the effect of this increase in premiums, the Health Care Financing Administration (HCFA) initiated a survey of premiums. HCFA asked the insurance company with the largest percentage of policies written in a particular state to provide premium data for that state. The premium data gathered by state and by specialty for the years 1974 through 1977 follow. In addition, information on premium and coverage levels from surveys conducted for HCFA by Abt Associates and by the National Opinion Research Center (NORC) are also presented.1 Given the completeness of these data, it is hoped they will aid researchers in studies on malpractice rates, such as measuring the effect of malpractice rates on physicians' costs and fees.

# Premium Data from the HCFA Survey of Malpractice Insurers

Table 1 shows the national average of premiums by specialty for 1974 through 1977. These premiums were calculated by determining the premium for a specialty within each state, weighting that premium by the percentage of those specialists practicing in that state and adding the state figures together. The premiums represent a standard policy offering coverage of \$100,000/\$300,000 <sup>2</sup> and consequently do not reflect changes occurring from increases in the amount of coverage purchased. In other words, the yearly percentage changes in premiums show a

<sup>&</sup>lt;sup>1</sup>The main purpose of the survey conducted in 1975 by Abt Associates and NORC was to gather data on physician Administrative costs and Medicaid participation. The 1976 survey gathered data on practice costs.

<sup>&</sup>lt;sup>2</sup> The first figure of the liability limit represents the yearly limit per case and the second, the limit for all cases in that year. Premiums reflect the price at the end of each year.

Table 1

National Average of Malpractice Premiums by Specialty for a Standard Policy, 1974–1977

Risk Categories	1974	1975	1976	1977
Class I 1,2	\$ 583	\$ 997	\$1413	\$1544
Class II 1,2	934	1677	2585	2762
Class III 1,2	1526	2730	3865	4118
Cardiology	1508	2424	3534	3924
Proctology	1793	3199	4591	5010
Ophthalmology Class IV	1366	2290	3109	3578
Cardiac Surgery	2338	3945	5701	6339
General Surgery Otolaryngology <sup>2</sup>	2521	4093	5452	6130
(no plastic surgery)	2135	3759	5200	5765
Thoracic Surgery	2651	4519	6405	7178
Vascular Surgery	2706	4511	6404	7155
Urology Class V	2189	3703	5211	5640
Anesthesiology	3071	5625	7633	8358
Neurosurgery	3448	6206	8383	9226
Obstetric/Gynecology	3073	5442	7478	8057
Orthopedic Surgery Otolaryngology 2	3527	6300	8641	9392
(plastic surgery)	2873	5243	7050	7649
Plastic Surgery	3299	5853	8293	9051

Source: Telephone Survey of Malpractice Insurance Companies conducted by HCFA.

<sup>1</sup> Class I includes physicians who do no surgery in the spedialties of general practice, aerospace medicine, forensic pathology, physical medicine, general preventive medicine, public health allergy, child psychiatry, neurology, psychiatry, gastroenterology, pediatrics, pediatric allergy, pulmonary disease, dermatology, internal medicine, and radiology.

Class II includes physicians in Class I specialties who do minor surgery or assist in major surgery on their own patients.

Class III includes physicians in these specialties who do major surgery plus physicians in cardiology, proctology, and ophthalmology.

<sup>2</sup> For the weighting of those specialties which needed to be split among classes, the State percentage for the total specialty was repeated for each sub-class because of lack of data on the distribution of physicians into these specific sub-classes.

pure price change without interference from changes in coverage purchased or individual factors such as surcharges due to the physician's incidence of malpractice claims. Classes I through V designate levels of risk (class I being the least risky) as perceived by the insurance companies.

From these four years of data, it can be seen that premiums have increased twofold since 1974. In 1974 premiums ranged from \$583 for primary care physicians who do no surgery to \$3,527 for orthopedic surgeons, while the range in 1977 for the same specialties was \$1,544 to \$9,392 respectively. The overall percentage increases for 1974 through 1977 in Table 2 show that premiums rose similarly for all specialties, with general surgeons having the lowest

Table 2
Percentage Change in Premiums for a Standard Policy, by Specialty, 1974–1977

Risk Categories	1974- 75	1975 <del>-</del> 76	1976- 77	1974- 77
Class I 1,2	71.0%	41.7%	9.3%	165%
Class II 1,2	79.6	54.1	6.9	196
Class III 1,2	78.9	41.6	6.6	170
Cardiology	60.7	45.4	11.4	160
Proctology	78.4	43.5	9.1	179
Ophthalmology Class IV	67.6	35.8	15.1	162
Cardiac Surgery	68.7	44.5	11.2	171
General Surgery Otolaryngology <sup>2</sup> (no plastic	62.4	33.2	12.4	143
surgery)	76.1	38.3	10.9	170
Thoracic Surgery	70.5	41.7	12.1	171
Vascular Surgery	66.7	42.0	11.7	164
Urology Class V	69.2	40.7	8.2	158
Anesthesiology	83.2	35.7	9.5	172
Neurology Obstetrics/	80.2	35.1	10.1	168
Gynecology Orthopedic	77.1	37.4	7.7	162
Surgery Otolaryngology <sup>2</sup>	78.6	37.2	8.7	166
(plastic surgery)	82.0	34.5	8.5	166
Plastic Surgery	81.3	41.7	9.1	180

Source: Telephone Survey of Malpractice Insurance Companies conducted by HCFA.

(See footnotes for Table 1)

at 143 percent and Class II physicians who perform minor surgery having the highest at 196 percent. The majority of the increases occurred during 1974–1975; since that time the increases in premiums have been much smaller.

Although these average premiums by specialty provide a benchmark for comparative purposes, they understate the dramatic increases which occurred in a few states. Table 3 illustrates the variation in increases in premiums by state. To calculate the average percentage change by state, the changes in premiums by specialty were weighted by the state's distribution of the specialties and then added together. To understand the variation between states, consider that in 1974–75, premiums in Massachusetts rose only 12 percent and in Mississippi 25 percent, while, in comparison, premiums in California rose by 145 percent and in Florida by 286 percent.

These sharp rises in 1974–75 were mitigated in some areas during 1975–76. For this year, premiums in thirteen states showed no change and those in five states actually declined, although this effect was partly the result of a new form of rate-setting which imposes lower rates in the early years of the policy

Table 3
Percentage Change in Premiums by State for 1974–1975, 1975–76 and 1976–77

State	1974– 1975	1975 1976	1976 1977
Alabama	40%	19%	319%
Alaska	NI	NI	NI
Arizona	109	115	50
Arkansas	40	63	4
California	145	147	0
Colorado	38	63	0
Connecticut	38	10	2
Delaware	71	0	-3
District of Columbia	40	108	0
Florida	286	0	33
Georgia	25	65	26
Hawaii	70	84	13
ldaho	62	-42	8
Illinois	78	110	6
Indiana	47	0	17
lowa	62	0	17
Kansas	68	-58	17
Kentucky	76	0	17
Louisiana	90	75	37
Maine	NI	0	29
Maryland	40	65	0
Massachusetts	12	0	7
Michigan	86	0	17
Minnesota	49	-34	-4
Mississippi	25	96	21
Missouri	68	. 0	17
Montana	77	38	0
Nebraska	58	47	-8
Nevada	95	0	NI
New Hampshire	NI	0	NI
New Jersey	47	55	0
New Mexico	84	60	25
New York	54	7	16
North Carolina	46	11	<b>-5</b>
North Dakota	19	57	-2
Ohio	66	33	17
Oklahoma	NI	35	27
Oregon	15	20	0
Pennsylvania	97	Ö	17
Rhode Island	70	<b>-</b> 7	Ö
South Carolina	72	26	50
South Dakota	37	<b>6</b> 3	Ō
Tennessee	193	128	-48
Texas	109	16	17
Utah	67	Ö	-1
Vermont	157	ŏ	_i
Virginia	Ni	<b>8</b>	-i
Washington	55	33	6
West Virginia	53	25	5
	36	ŏ	17
Wisconsin			

Source: Telephone Survey of Malpractice Insurance Companies conducted by HCFA.

and higher ones later on.<sup>3</sup> During this same period, however, premiums in the District of Columbia, Illinois, Arizona, and Tennessee increased over 100 percent. By 1976–77, our last year of data, rates in all states either increased or decreased modestly, indicating a leveling-off.

# Premium and Coverage Data from the Physician Surveys

The above data clearly illustrate the changes in prices for a standard policy. The 1974 through 1976 premium data from surveys by Abt Associates and NORC incorporate changes in the amount of coverage purchased as well as price. Therefore, these premiums represent what physicians paid out of pocket for insurance.

The sample for the 1974 data consisted of 1,000 physicians in 5 specialties selected from a national clustered sampling frame. The sample for 1975 and 1976 data was composed of approximately 3,500 office-based physicians in 15 specialties and 500 hospital-based physicians in 3 specialties, selected randomly from a national file of physicians.

The data on average premiums paid are shown in Table 4 where the premiums for the Class I, II, and III physicians are within the range of premiums for the first three specialty classes in Table 1 (that is, from \$1413 to \$3865 for 1976). The 1976 premiums for the two surgical specialties <sup>1</sup> in Class IV (general surgery and urology) are higher than those in Table 1 by 47 and 42 percent, respectively. Similarly, in Class V, the 1976 premiums in Table 4 for anesthesiology, neurosurgery, obstetrics/gynecology, and orthopedic surgery exceed those in Table 1 by 22, 53, 32, and 61 percent, respectively.

One explanation why out-of-pocket insurance costs exceeded those for the standard policy is that physicians are purchasing insurance in excess of the \$100,000/\$300,000 limits of the standard policy. A study of the amount of coverage purchased shows that over 50 percent of the physicians in each specialty are covered for at least \$1 million.5

<sup>&</sup>lt;sup>a</sup> Traditionally, rates have been established using an occurrence method. If the physician has an occurrence policy, he is covered by the original insurer for any injury occurring during the policy period even if the physician is with a different insurer when the claim is filed. With the new method called claims-made, the physician is only covered for an injury which occurred and for which the claim was filed while the specific policy is in force.

<sup>&</sup>lt;sup>4</sup> Because the premiums for otolaryngologists in Table 4 incorporate otolaryngologists included in Class IV who do no plastic surgery and those in Class V who do plastic surgery, the premiums for otolaryngologists can not be compared with those in Table 1.

<sup>5\$1</sup> million worth of coverage is not always available from a single company. Some companies only offer up to \$300,000 worth of coverage. In that case, the physician has to buy additional policies often in the form of "umbrella" policies.

Table 4

National Average of Malpractice Premiums Paid for 1974, 1975 and 1976, by Specialty

Risk Category	1974 <sup>2</sup>	1975 <sup>3</sup>	1976 ³
Classes I, II, III 1			
Allergy		\$2157	\$2943
Dermatology		2800	3342
Gastroenterology		2643	3344
General Practice	1704	2712	3534
Internal Medicine	1059	1963	2673
Pathology		2157	2873
Pediatrics	799	1774	2584
Psychiatry		1036	1297
Radiology		2725	3986
Class III			
Cardiology		2976	3638
Ophthalmology		3310	4527
Class IV			
General Surgery	4064	6664	7728
Otolaryngology 4		6475	7584
Urology		6817	7674
Class V			
Anesthesiology		7742	9328
Neurosurgery		11494	12804
Obstetrics/Gynecology	3930	8601	9884
Orthopedic Surgery	VVVV	11164	13918

Sources: Abt Associates/NORC Survey of Physicians Administration Costs; NORC/HCFA Survey of Physician's Practice Costs.

<sup>2</sup> Only five specialties were surveyed in this year.

As seen in Table 5, in 1976 the percentage of physicians covered for at least \$1 million was from 54.9 percent of general practitioners to 82.9 percent of orthopedic surgeons. However, these percentages are somewhat lower than those in 1975. A comparison of the 1975 and 1976 data shows that, in all but three instances (gastroenterology, internal medicine, and ophthalmology), the percent of physicians having \$1 million of coverage declined in 1976. In addition, three of the five specialties had fewer physicians with coverage over \$1 million in 1975 than in 1974. One interpretation of these data is that since 1974, physicians have become less concerned about large claims settlements. Another is that physicians are just responding to the increase in the price of insurance.

Contrary to these interpretations, in all but four of the specialties, the percent of those purchasing at least \$5 million worth of liability coverage has increased or stayed the same. Given the overall trend towards lower liability limits, these figures are difficult to

Table 5

Percent of Phycisions Purchasing Malpractice Insurance Coverage of at least \$1 Million in 1974, 1975, 1976, by Specialty

Risk Category	1974 \$1M		75 ° \$5M	197 \$1M	7
Classes I, II, III 1					
Allergy		75.4	4.1	74.4	4.1
Dermatology		77.1	2.9	77.1	3.7
Gastroenterology		75.0	4.9	76.5	7.4
General Practice	50.9	56.8	1.8	54.9	2.1
Internal Medicine	73.2	66.9	4.2	68.8	5.7
Pathology		69.7	7.5	68.7	7.5
Pediatrics	65.3	63.2	2.6	62.6	3.5
Psychiatry		59.1	3.8	59.0	3.5
Radiology		80.0	3.2	78.9	2.6
Class III					
Cardiology		74.0	7.8	74.4	9.0
Ophthalmology		71.3			
Class IV					
General Surgery	68.9	69.9	3.4	67.0	3.7
Otolaryngology 4		70.1	2.4	65.1	4.0
Urology		71.3	3.0	67.6	4.9
Class V					
Anesthesiology		80.9	7.3	76.6	5.8
Neurosurgery		78.2			
Obstetrics/Gynecology	75. <b>7</b>				
Orthopedic Surgery	, 0.,	84.4		82.9	

Sources: Abt Associates/NORC Survey of Physicians' Administrative Costs; NORC/HCFA Survey of Physicians' Practice Costs.

(See Table 4 for Footnotes)

interpret except to say that there is a small percentage of physicians who either don't want to take any risks or who are performing particularly risky procedures.

Whereas Table 5 indicates general levels of and trends in coverage, Tables 6 and 7 show the degree to which physicians changed coverage. These tables indicate that, overall, regardless of the amount of coverage purchased, at least 82 percent of all physicians maintained the same amount of coverage in 1975 and 1976. From 1975 to 1976, in only six of the 18 specialties did more physicians increase their coverage than decrease it. Similarly, for 1974 to 1975, in all five specialties, the number of physicians who decreased their coverage more than offset those who increased it. This fact is somewhat surprising since 1975 was supposedly the height of the malpractice crisis.

Given that there were more physicians who purchased less coverage than there were those who purchased more, it might be expected that some of the overall increases in out-of-pocket costs would be offset. Comparing, for 1975–76, the percentage change in premiums for a standard policy in Table 2 with the percentage change in out-of-pocket costs in Table 8, the rate of increase in out-of-pocket costs which physicians actually paid was less than the rate of inflation in malpractice premiums, especially for the surgical specialties in Classes IV and V.

<sup>&</sup>lt;sup>1</sup> Most physicians in the specialties listed under Classes I, III would be in Class I (that is, physicians who do no surgery). There were no means to separate out those in Classes II and III who do minor or major surgery.

<sup>\*</sup>The samples for the years 1975 and 1976 contain the same physicians. The physicians for 1974 are from a different sample and include solo practitioners only.

<sup>\*</sup>Otolamygologists are divided between Class IV and Class V, depending on whether they perform plastic surgery. Since information was not available to make this determination, the premium average here represents both groups.

This trend toward purchasing less insurance provides some evidence on the characteristics of the demand for malpractice insurance. Those who decreased their coverage could be motivated by two factors: (1) an increase in prices caused a decrease

Table 6

Percent of physicians who changed the amount of maipractice insurance purchased in 1974–1975, by specialty

Risk Category	In- creased	De- creased	No Change
Class I, II, III 1		<del></del> -	
General Practice	6%	6%	88%
Internal Medicine	6	11	83
Pediatrics	4	8	88
Class IV			
General Surgery	3	11	86
Class V		_	
Obstetrics/Gynecology	4	5	91

Source: Abt Associates/NORC Survey of Physicians' Administrative Costs

Table 7

Percent of physicians who changed the amount of malpractice insurance purchased in 1975–1976, by specialty

Risk Category	In- creased	De- creased	No Change
Classes i, II, III		<del></del>	<b>-</b>
Allergy	5.1%	1.7%	93.2%
Dermatology	5.8	6.7	87.5
Gastroenterology	7.6	7.6	84.8
General Practice	4.6	5.9	89.5
Internal Medicine	5.5	5.5	88.9
Pathology	6.3	4.9	88.9
Pediatrics	4.7	5.4	89.9
Psychiatry	7.2	6.9	85.8
Radiology	6.6	9.3	84.1
Class III			
Cardiology	8.0	6.7	85.3
Ophthalmology	5.0	2.5	92.5
Class IV			
General Surgery	4.5	6.4	89.1
Otolaryngology 2	2.5	9.9	87.6
Urology	7.1	10.2	82.7
Class V			
Anesthesiology	5.5	12.3	82.2
Neurosurgery	5.7	3.8	90.6
Obstetrics/Gynecology	4.2	7.5	88.3
Orthopedic Surgery	3.0	8.9	88.1

Sources: NORC/HCFA Survey of Physician's Practice Costs. (See Table 4 for Footnotes)

in the amount of coverage demanded; (2) and/or physicians felt less need to be protected against large malpractice settlements. In economic terms, the increases in prices would cause a movement down the demand curve, whereas a change in the physician's perception of the environment would cause a downward shift of the entire curve.

If physicians are responding to the increase in prices, it would suggest that the upper portion of the demand curve is somewhat elastic. However, given that most hospitals require that physicians have insurance in order to maintain staff privileges, the lower portion of the curve is probably very inelastic, thus causing a kink in the demand curve.

Table 8

Percentage Change in Premiums Paid by Specialty, 1974–
75 and 1975–76.

Risk Category	1974-75 <sup>2</sup>	<b>1975-76</b> <sup>3</sup>
Classes I, II, III 1		·
Allergy		36%
Dermatology		19
Gastroenterology		27
General Practice	59%	30
Internal Medicine	85	3 <b>6</b>
Pathology		33
Pediatrics	122	46
Psychiatry		25
Radiology		46
Class III		
Cardiology		22
Ophthalmology		37
Class IV		
General Surgery	64	16
Otolaryngology 4		17
Urology		13
Class V	,	
Anesthesiology		20
Neurosurgery		11
Obstetrics/Gynecology	119	15
Orthopedic Surgery		25

Sources: Abt Associates/NORC Survey of Physician's Administrative Cost; NORC/HCFA Survey of Physician's Practice Costs.

(See Table 4 for Footnotes)

In contrast to those physicians who changed their coverage, some physicians responded to the large increases in premiums by purchasing no insurance at all. The percentage of physicians who bought no insurance in 1974, 1975, or 1976 is shown in Table 9. In all specialties, the percentage of physicians "going bare" increased between 1974 and 1975 and then declined in all but five specialties between 1975 and 1976. Anecdotal evidence (such as news media reports) suggests that, especially for 1975, these figures would be significantly higher. However, it is probable to assume that there are a few small but

<sup>&</sup>lt;sup>1</sup> Most physicians in the specialties listed under Classes I, III would be in Class I (that is, physicians who do no surgery). There was no information with which to separate out those in Classes II and III who do minor or major surgery in these specialties.

concentrated areas in the country where physicians are going bare. This uneven distribution would reflect the large variation in the change in premium rates and absolute levels of premiums by state as shown in Table 3. For instance, *Medical World News* (January 1977) reported that as many as 40 percent of physicians in Alaska may not have purchased insurance during 1976 as a protest against the Insurance Commission's method of setting premiums in accordance with income levels. In a state such as South Carolina where the standard policy for orthopedic surgeons cost \$2364 in 1976 (compared to the national average of \$8641), it can be expected that only a handful of physicians would not purchase insurance.

Table 9

Percent of Physicians with No Insurance in 1974, 1975, and 1976, by Specialty

Risk Category	1974 <sup>2</sup>	<b>1975</b> ³	1976 <sup>3</sup>
Classes I, II, III 1			
Allergy		4.7%	4.7%
Dermatology		.8	1.6
Gastroenterology		2.1	2.1
General Practice	4.4%	6.0	6.0
Internal Medicine	1.8	2.2	.9
Pathology		3.9	2.8
Pediatrics	1.5	2.3	2.0
Psychiatry		4.6	3.6
Radiology		3.3	1.7
Class III			
Cardiology		4.0	3.0
Ophthalmology		3.2	3.9
Class IV			
General Surgery	1.1	3.8	3.1
Otolaryngology 4		6.8	3.4
Urology		3.0	1.5
Class V			
Anesthesiology		4.9	3.8
Neurosurgery		4.4	2.9
Obstetrics/Gynecology	4.2	5.3	3.4
Orthopedic Surgery	- <del>-</del>	5.9	2.9

Sources: Abt Associates/NORC Survey of Physicians' Administrative Costs; NORC/HCFA Survey of Physicians' Practice Costs.

(See Table 4 for Footnotes)

#### **Conclusions**

Although it cannot be denied that malpractice premiums have risen dramatically, our surveys indicate that only selected specialists in a few states are bearing a financial burden. Given that approximately 55 percent of physicians are in the three low risk categories and pay less than \$4,000 per year for insurance, the higher malpractice premiums are financially manageable for most physicians. Table 10 shows premiums as a percent of practice expenses. Except for anesthesiologists, whose premiums are 21 percent of their expenses, premiums represent no more than 7 percent of practice expenses. However,

this is not to say that the "malpractice crisis" did not have and will not continue to have an impact on health care.

Table 10

Malpractice Premiums as a Percent of Expenses for 1976, by Specialty

Risk Category	Premiums/Expenses
Classes I, II, III 1	<u> </u>
Allergy	3%
Dermatology	3
Gastroenterology	
General Practice	3
Internal Medicine	2
Pathology	7
Pediatrics	2 3 2 7 2 2 6
Psychiatry	2
Radiology	6
Class III	
Cardiology	3
Ophthalmology	5
Class IV	
General Surgery	7
Otolarnygology <sup>1</sup>	7 7 5
Urology	5
Class V	
Anesthesiology	21
Neurosurgery	7
Obstetrics/Gynecology	6
Orthopedic Surgery	6

Sources: NORC/HCFA Survey of Physicians' Practice Costs. (See Table 4 for Footnotes)

The increase in malpractice premiums has implications for other health issues, one of the most important being the effect on health costs. Greenwald and Mueller (1978) found that all of the increased cost of premiums is shifted to the patient. Using 1970 data, they found that an increase in premiums of 100 percent caused the average cost of an office visit to increase by 9.1 percent.

Because physicians are able to pass costs on to the patient, it seems unlikely that an established physician would relocate in response to high premiums in his state. However, for a newly-licensed physician, high premiums may establish a barrier to entry. In states such as California, New York, and New Jersey where there are high physician/population ratios relative to the national average, it is unlikely that a reduction in the number of new physicians setting up practice would affect patient care. However, there are other states such as Arizona, Maine, Montana, Wyoming, Oregon, and Washington that have high premiums and low physician/population ratios. The impact of high premiums on the attractiveness of these areas to newly licensed physicians is unknown.

The growth in the number of ancillary services, arising partly as a defense against possible malpractice suits, is another inflationary result of increases in premiums. Stanford Research Institute (1975) estimated that the number of lab tests doubled between 1969 and 1975. Altough the direct contribution of the threat of malpractice suits to this growth has not been measured, many health professionals feel that it has been an important factor.

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